

# WEST Search History

[Hide Items](#) [Restore](#) [Clear](#) [Cancel](#)

DATE: Thursday, November 10, 2005

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
		<i>DB=PGPB,USPT; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L6	l2 not l5	7
		<i>DB=USPT,PGPB; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L5	("GODDARD-AUDERY".IN.   "GODDARD-AUDREY".IN.   "GODDARD-AUDREY-D".IN.   "GODDARD-AUDREY-L".IN.)!	1924
		<i>DB=PGPB,USPT; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L4	L1 not l3	4
<input type="checkbox"/>	L3	DNA64881\$	770
<input type="checkbox"/>	L2	L1 or DNA64881\$	774
<input type="checkbox"/>	L1	PRO1357 or (PRO 1357) or dna64811\$	774

END OF SEARCH HISTORY



US 2004/0002120A1

(19) **United States**(12) **Patent Application Publication****Kekuda et al.**(10) **Pub. No.: US 2004/0002120 A1**(43) **Pub. Date: Jan. 1, 2004**(54) **THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODS OF USE**

(76) **Inventors:** Ramesh Kekuda, Danbury, CT (US); Velizar T. Tchernev, Branford, CT (US); Xiaohong Liu, Branford, CT (US); Kimberly A. Spytek, New Haven, CT (US); Meera Patturajan, Branford, CT (US); Catherine E. Burgess, Wethersfield, CT (US); Corine A.M. Vernet, Branford, CT (US); Li Li, Branford, CT (US); Linda Gorman, Branford, CT (US); Uriel M. Malyankar, Branford, CT (US); Ferenc L. Boldog, North Haven, CT (US); Xiaojia (Sasha) Guo, Branford, CT (US); Suresh G. Shenoy, Branford, CT (US); Muralidhara Padigar, Branford, CT (US); Raymond J. Taupier JR., East Haven, CT (US); Charles E. Miller, Guilford, CT (US); Stacie J. Casman, North Haven, CT (US); Carol E. A. Pena, New Haven, CT (US); Esha A. Gangolli, Madison, CT (US); Vladimír Y. Gusev, Madison, CT (US); Glenda Smithson, Guilford, CT (US); Bryan D. Zerhusen, Branford, CT (US); Valerie Gerlach, Branford, CT (US); Pascale F-J Pochart, Madison, CT (US); Elma R. Fernandes, Branford, CT (US); Richard A. Shimkets, Guilford, CT (US); Luca Rastelli, Guilford, CT (US); Steven K. Spaderna, Berlin, CT (US); William J. LaRochelle, Madison, CT (US); Mei Zhong, Branford, CT (US); Nikolai V. Khramtsov, Branford, CT (US); Edward Z. Voss, Wallingford, CT (US); John L. Herrmann, Guilford, CT (US)

**Correspondence Address:**

Ivor R. Elrifi  
MINTZ, LEVIN, COHN, FERRIS,  
GLOVSKY and POPEO, P.C.  
One Financial Center  
Boston, MA 02111 (US)

(21) **Appl. No.: 10/094,886**(22) **Filed: Mar. 7, 2002****Related U.S. Application Data**

(60) Provisional application No. 60/274,322, filed on Mar. 8, 2001. Provisional application No. 60/313,182, filed on Aug. 17, 2001. Provisional application No. 60/288,052, filed on May 2, 2001. Provisional application No. 60/318,510, filed on Sep. 10, 2001. Provisional application No. 60/274,281, filed on Mar. 8, 2001. Provisional application No. 60/314,018, filed on Aug. 21, 2001. Provisional application No. 60/274,194, filed on Mar. 8, 2001. Provisional application No.

60/274,849, filed on Mar. 9, 2001. Provisional application No. 60/296,693, filed on Jun. 7, 2001. Provisional application No. 60/313,626, filed on Aug. 20, 2001. Provisional application No. 60/332,486, filed on Nov. 9, 2001. Provisional application No. 60/275,235, filed on Mar. 12, 2001. Provisional application No. 60/275,578, filed on Mar. 13, 2001. Provisional application No. 60/288,228, filed on May 2, 2001. Provisional application No. 60/275,579, filed on Mar. 13, 2001. Provisional application No. 60/312,916, filed on Aug. 16, 2001. Provisional application No. 60/275,601, filed on Mar. 13, 2001. Provisional application No. 60/311,978, filed on Aug. 13, 2001. Provisional application No. 60/276,000, filed on Mar. 14, 2001. Provisional application No. 60/276,776, filed on Mar. 16, 2001. Provisional application No. 60/296,856, filed on Jun. 8, 2001. Provisional application No. 60/276,994, filed on Mar. 19, 2001. Provisional application No. 60/291,766, filed on May 17, 2001. Provisional application No. 60/277,338, filed on Mar. 20, 2001. Provisional application No. 60/288,066, filed on May 2, 2001. Provisional application No. 60/277,239, filed on Mar. 20, 2001. Provisional application No. 60/315,227, filed on Aug. 27, 2001. Provisional application No. 60/318,403, filed on Sep. 10, 2001. Provisional application No. 60/277,327, filed on Mar. 20, 2001. Provisional application No. 60/277,791, filed on Mar. 21, 2001. Provisional application No. 60/325,378, filed on Sep. 27, 2001. Provisional application No. 60/277,833, filed on Mar. 22, 2001. Provisional application No. 60/278,152, filed on Mar. 23, 2001. Provisional application No. 60/310,913, filed on Aug. 8, 2001. Provisional application No. 60/303,237, filed on Jul. 5, 2001. Provisional application No. 60/278,894, filed on Mar. 26, 2001. Provisional application No. 60/322,360, filed on Sep. 14, 2001. Provisional application No. 60/279,036, filed on Mar. 27, 2001. Provisional application No. 60/312,191, filed on Aug. 14, 2001. Provisional application No. 60/278,999, filed on Mar. 27, 2001. Provisional application No. 60/280,233, filed on Mar. 30, 2001. Provisional application No. 60/303,230, filed on Jul. 5, 2001. Provisional application No. 60/345,399, filed on Nov. 9, 2001. Provisional application No. 60/322,296, filed on Sep. 14, 2001. Provisional application No. 60/280,802, filed on Apr. 2, 2001.

**Publication Classification**

(51) **Int. Cl.<sup>7</sup>** ..... G01N 33/53; G01N 33/567; A61K 38/17; C12P 21/02; C12N 5/06; C07K 14/705; C07H 21/04  
(52) **U.S. Cl.** ..... 435/7.2; 435/69.1; 435/320.1; 435/325; 530/350; 536/23.5; 514/12

**(57) ABSTRACT**

Disclosed herein are nucleic acid sequences that encode G-coupled protein-receptor related polypeptides. Also disclosed are polypeptides encoded by these nucleic acid sequences, and antibodies, which immunospecifically bind to the polypeptide, as well as derivatives, variants, mutants, or fragments of the aforementioned polypeptide, polynucleotide, or antibody. The invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders involving any one of these novel human nucleic acids and proteins.

TABLE 21C

Protein Sequence Properties NOV21a	
PSort	0.6138 probability located in outside; 0.4772 probability
analysis:	located in lysosome (lumen); 0.1000 probability located
	in endoplasmic reticulum (membrane); 0.1000
	probability located in endoplasmic reticulum (lumen)

TABLE 21C-continued

Protein Sequence Properties NOV21a	
SignalP	Likely cleavage site between residues 25 and 26
analysis:	

[0434] A search of the NOV21a protein against the Geneseq database, a proprietary database that contains sequences published in patents and patent publications, yielded several homologous proteins shown in Table 21D.

TABLE 21D

Geneseq Results for NOV21a					
Geneseq Identifier	Protein/Organism/Length [Patent #, Date]	NOV21a Residues/Match Residues	Identities/Similarities for the Matched Region	Expect Value	
AAY77126	Human neurotransmission-associated protein (NTAP) 2799056 - <i>Homo sapiens</i> , 484 aa. [WO200001821-A2, 13-JAN-2000]	1 ... 439 1 ... 484	431/492 (87%) 431/492 (87%)	0.0	
AAG63976	Amino acid sequence of a human Lng103 polypeptide - <i>Homo sapiens</i> , 484 aa. [WO200161055-A2, 23-AUG-2001]	1 ... 439 1 ... 484	430/492 (87%) 431/492 (87%)	0.0	
AAU29163	Human PRO polypeptide sequence #140 - <i>Homo sapiens</i> , 484 aa. [WO200168848-A2, 20-SEP-2001]	1 ... 439 1 ... 484	430/492 (87%) 431/492 (87%)	0.0	
AAB87564	Human PRO1357 - <i>Homo sapiens</i> , 484 aa. [WO200116318-A2, 08-MAR-2001]	1 ... 439 1 ... 484	430/492 (87%) 431/492 (87%)	0.0	
AAB66124	Protein of the invention #36 - Unidentified, 484 aa. [WO200078961-A1, 28-DEC-2000]	1 ... 439 1 ... 484	430/492 (87%) 431/492 (87%)	0.0	

[0435] In a BLAST search of public sequence databases, the NOV21a protein was found to have homology to the proteins shown in the BLASTP data in Table 21E.

TABLE 21E

Public BLASTP Results for NOV21a					
Protein Accession Number	Protein/Organism/Length	NOV21a Residues/Match Residues	Identities/Similarities for the Matched Portion	Expect Value	
Q96HK6	SIMILAR TO DNA SEGMENT, CHR 2, MASSACHUSETTS INSTITUTE OF TECHNOLOGY 19 - <i>Homo sapiens</i> (Human), 484 aa.	1 ... 439 1 ... 484	428/492 (86%) 431/492 (86%)	0.0	
Q61114	VON EBNER MINOR SALIVARY GLAND PROTEIN - <i>Mus musculus</i> (Mouse), 474 aa.	1 ... 429 1 ... 473	252/482 (52%) 324/482 (66%)	e-127	
Q9BWZ6	DJ1187J4.1.1 (NOVEL PROTEIN SIMILAR TO MOUSE VON EBNER SALIVARY GLAND PROTEIN, ISOFORM 1.) - <i>Homo sapiens</i> (Human), 285 aa (fragment).	200 ... 439 1 ... 285	232/293 (79%) 232/293 (79%)	e-116	
Q9BQP8	BA49G10.6 (SIMILAR TO MURINE VON EBNER MINOR SALIVARY GLAND PROTEIN, ISOFORM 1) - <i>Homo sapiens</i> (Human), 199 aa (fragment).	1 ... 199 1 ... 199	199/199 (100%) 199/199 (100%)	e-107	